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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/673,332  | 09/30/2003  | Atsushi Sugasaki     | Q77298              | 2251             |
| 23373   | 7590        | 01/31/2005           | EXAMINER            |                  |
| SUGHRUE MION, PLLC<br>2100 PENNSYLVANIA AVENUE, N.W.<br>SUITE 800<br>WASHINGTON, DC 20037 |             |                      | LEE, SIN J          |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 1752                |                  |

DATE MAILED: 01/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |                        |                     |  |
|---|------------------------|---------------------|--|
| <b>Supplemental Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|   | 10/673,332             | SUGASAKI ET AL.     |  |
|   | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|   | Sin J. Lee             | 1752                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. <u>01272005</u> . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                                    |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>04/02/04</u> . | 6) <input type="checkbox"/> Other: _____.  |

### DETAILED ACTION

1. It is to be noted that the non-final Office action mailed on January 25, 2005 is hereby withdrawn, and the following Office action is supplemental to the Office action of January 25, 2005 because the Examiner inadvertently overlooked the preliminary amendment filed on September 30, 2003. The following Office action is based on the preliminary amendment of September 30, 2003.

#### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 8 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 8, applicants recite that *an image is formed* by a laser beam having a wavelength of 300 to 1,200 nm (i.e., applicants are reciting an imaging *step*). However, present claim 6, on which claim 8 depend, is not a process claim, but a product claim. Therefore, the scope of present claim 8 is indefinite. For the same logic, the scope of present claim 16 is indefinite.

Appropriate correction is required. For the purpose of examining the claims 8 and 16 on the merit, the Examiner interpreted those claims to mean that the precursors of claims 6 and 15 are capable of being imaged by using a laser beam having a wavelength of 300 to 1,200 nm.

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4. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14 recites the limitation "... precursor according to *claim 6*, wherein *the* thermal polymerization inhibitor is ..." in lines 1 and 2. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

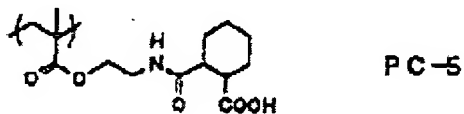
5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

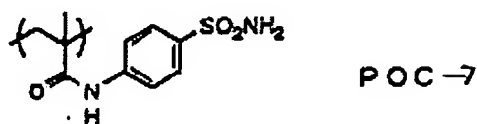
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Oshima (EP 1 176 467 A1).

Oshima teaches (see Table 2, pg.32, pg.33) a binder polymer P-21 (with Mw of 12.3 x10,000) which has the following repeating units;



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The repeating unit PC-5 shown above teaches present repeating unit of the formula (I) (present A is an oxygen, present R<sup>2</sup> is a linking group which includes 9 carbon atoms, 15 H atoms, 1 oxygen atom, and 1 nitrogen atom (thus, 26 atoms in total)). Oshima teaches ([0041]) a composition containing his binder polymer and an addition polymerizable compound. Oshima furthermore teaches the *use of an infrared absorber together with onium salts (as a heat-decomposable radical generator) such as iodonium salts, diazonium salts, and sulfonium salts for the case where a laser, which emits IR rays (760-1,200 nm), is to be used* (see [0066], [0081], [0082]). Oshima teaches (see [0139]-[0146]) an aluminum support onto which a photosensitive layer (in which his composition is contained) is formed. Therefore, the prior art teaches present inventions of claims 1-4, 6, 8-10. It is also the Examiner's position that Oshima's photosensitive layer, which teaches present photosensitive layer, would inherently have the present developing velocity range of claim 15 at the unexposed areas and present permeating velocity range of claim 15 at the exposed areas. Therefore, the prior art teaches present inventions of claims 15-18 as well.

With respect to present claim 5, since Oshima teaches present binder polymer of claim 1, it is the Examiner's position that Oshima's binder polymer P-21 would inherently possess present Tg range of claim 5. Thus, the prior art teaches present invention of claim 5.

With respect to present claim 7, Oshima teaches the use of present acrylic backbone-chain or urethane binder together with his binder polymers in [0036].

Therefore, the prior art teaches present invention of claim 7.

Oshima teaches (see 0088]) that his heat-decomposable radical generators can be added in the amount of 0.1-50 wt.% based on the solid contents in his photosensitive layer. Therefore, the prior art teaches present inventions of claims 11 and 19.

Oshima teaches (see [0058]) the use of his addition-polymerizable compound in the amount of 5-80 wt.% based on the solid contents of his photosensitive layer.

Therefore, the prior art teaches present inventions of claims 12 and 20.

Oshima teaches the use of present thermal polymerization inhibitors in [0093]. Therefore, the prior art teaches present inventions of claims 13 and 14.

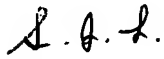
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sin J. Lee whose telephone number is 571-272-1333. The examiner can normally be reached on Monday-Friday from 9:00 am EST to 5:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly, can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

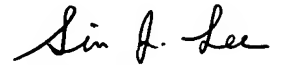
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



S. Lee  
January 27, 2005



Sin J. Lee  
Patent Examiner  
Technology Center 1700